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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/004,304	11/02/2001	Anuj Batra	TI-33612	9327
23494	7590	08/01/2006	EXAMINER	
TEXAS INSTRUMENTS INCORPORATED			LY, ANH VU H	
P O BOX 655474, M/S 3999			ART UNIT	
DALLAS, TX 75265			PAPER NUMBER	
			2616	

DATE MAILED: 08/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/004,304	BATRA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Anh-Vu H. Ly	2616	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 June 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 20,21,23-27 and 29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20,21,23-27 and 29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All   b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 21, 2006 has been entered.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 20-21, 23-27, and 29 are rejected under 35 U.S.C. 102(e) as being anticipated by Garcia-Luna-Aceves et al. (US Pub 2002/0141479 A1). Hereinafter, referred to as Garcia-Luna-Aceves.

With respect to claims 20 and 26, Garcia-Luna-Aceves discloses a method of communication in a frequency hopping wireless network (Fig. 1) comprising:

initiating communication from a master device to a slave device on a first channel (Fig. 1, at frequency hop h1 and t1, node x initiates a communication between node x and node y by

sending a RTR control packet to node y. Herein, node x is the master device and node y is the slave device, as considered by examiner); and

responding to the master device from the slave device on the first channel (Fig. 1, at frequency hop h1 and t2, node y sends data to node x after receiving the RTR control packet),

wherein the initiating communication from the master device comprises sending data to the slave device in a first time slot on the first channel (Fig. 1, at frequency hop h1, node x initiates a communication between node x and node y by sending a RTR control packet to node y on time slot t1), and the packet from the slave device is transmitted in a second time slot immediately following the first time slot on the first channel (Fig. 1, at frequency hop h1, node y sends data to node x in time slot t2, which is adjacent to first time slot t1).

With respect to claims 21 and 27, Garcia-Luna-Aceves discloses that wherein the slave responding to the master device comprising transmitting a packet to the master device on the first channel (Fig. 1, node y sends data to node x on frequency hop h1), wherein the first channel is used for transmission during entire length of the packet (page 4, 60<sup>th</sup> paragraph, at a data rate of 1 Mbps, four hundred millisecond hop time limit provides ample time for transmitting entire data packets and packet trains).

With respect to claims 23 and 29, Garcia-Luna-Aceves discloses that wherein the wireless network is a Bluetooth wireless network (page 2, 13<sup>th</sup> paragraph and Fig. 2 – a MAC protocol taking advantage of characteristics of FHSS radios operating in ISM bands while

assuring that transmissions are free of collisions. It is known that Bluetooth frequency band is also an ISM band, 2.4 GHz band).

With respect to claim 24, Garcia-Luna-Aceves discloses that wherein the first channel is selected via a random hopping sequence (Fig. 2, at step 14, engaging over a channel hop only when data is available for sending. This implies that random channel hop in the common channel hopping sequence is selected only when data is available, e.g., channel hop h1, h2, h3, etc...).

With respect to claim 25, Garcia-Luna-Aceves discloses that wherein the first channel is selected via an intelligent frequency hopping sequence (Fig. 1 illustrates that channel hop h1 is selected right away or intelligently selected when data is available for transferring between nodes x and y).

### ***Response to Arguments***

3. Applicant's arguments filed June 21, 2006 have been fully considered but they are not persuasive.

Applicant argues in page 4 that applicants respectfully point to the Examiner that a close and careful review of Figure 1 reveals that actually, the node y sends data to node x in time slot 5 and not in the time slot 2 as the Examiner has alleged.

Examiner respectfully disagrees. As clearly illustrated in Fig. 1, node y sends data to node x during time slots t2-t8, therefore, data from node y sends to node x immediately following the first time slot on the first channel. The reason why the legend "y->x" appears in

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time slot t5 of Figure 1 and not at other time slots is to make the appearance of the legend to align evenly between timeslots t2 to t8 but that is not when the data actually begins to transmit to node x from node y. It is like aligning a word in center between the left and right margins.


***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh-Vu H. Ly whose telephone number is 571-272-3175. The examiner can normally be reached on Monday-Friday 7:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

avl

  
CHI PHAM  
SUPERVISORY PATENT EXAMINER 7/27/07